AMENDEMENTS TO THE CLAIMS

Claims 1-21 (Canceled)

22. (Previously presented) A transgenic mouse whose genome comprises a disruption in an endogenous NTTP1 gene, wherein where the disruption is homozygous, the transgenic mouse lacks production of functional NTTP1 protein, and exhibits anti-depressive behavior when compared to a wild-type mouse.

23. (Previously presented) The transgenic mouse of claim 22, wherein the anti-depressive behavior is characterized by a decrease in time spent immobile while tail suspended, relative to a wild-type control mouse.

24. (Previously presented) A cell or tissue obtained from the transgenic mouse of claim 22.

25. (Previously presented) A transgenic mouse comprising a heterozygous disruption in an endogenous NTTP1 gene, wherein the disruption in a homozygous state inhibits production of functional NTTP1 protein resulting in a transgenic mouse exhibiting anti-depressive behavior when compared to a wild-type mouse.

26. (Previously presented) The transgenic mouse of claim 25, wherein the anti-depressive behavior is characterized by a decrease in time spent immobile while tail suspended, relative to a wild-type control mouse.

27. (Previously presented) A method of producing a transgenic mouse comprising a disruption in an endogenous NTTP1 gene, the method comprising:

(a) introducing a targeting construct capable of disrupting endogenous NTTP1 gene into a murine embryonic stem cell;

(b) selecting for the murine embryonic stem cell which has undergone homologous recombination;

(c) introducing the murine embryonic stem cell selected for in step (b) into a mouse blastocyst;

(d) implanting the resulting blastocyst into a pseudopregnant mouse, wherein the resultant mouse gives birth to a chimeric mouse; and

(e) breeding the chimeric mouse to produce the transgenic mouse,

wherein where the disruption is homozygous, the transgenic mouse lacks production of functional NTTP1 protein and exhibits anti-depressive behavior when compared to a wild-type mouse.

Claims 28-31 (Canceled)